Listing of Claims

1. (Original) A method of increasing an immune response to an opportunistic infection in an immunocompromised subject, comprising administering to the subject a therapeutically effective amount of an immunostimulatory D oligodeoxynucleotide or an immunostimulatory K oligodeoxynucleotide, thereby increasing the response to the opportunistic infection.

2. (Original) The method of claim 1, wherein the subject is immunocompromised as a result of an infection with a lentivirus, and wherein the method comprises administering a therapeutically effective amount of an immunostimulatory D oligodeoxynucleotide to the subject.

3. (Original) The method of claim 2, wherein the lentivirus is a human immunodeficiency virus or a simian immunodeficiency virus.

4. (Original) The method of claim 2, wherein the lentivirus is HIV-1.

5. (Original) The method of claim 2, wherein the lentivirus is HIV-2.

6. (Original) The method of claim 1, wherein the subject has acquired immune deficiency syndrome (AIDS).

7. (Currently Amended) The method of claim 1, wherein the oligodeoxynucleotide is at least ~~about~~ 16 nucleotides in length and comprises a sequence represented by the following formula:

5' $X_1X_2X_3$ Pu_1 Py_2 CpG Pu_3 Py_4 $X_4X_5X_6(W)_M$ $(G)_N$-3' (SEQ ID NOs: 22-98)

wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10.

8. (Currently Amended) The method of claim 7, wherein N is ~~about 6~~.

9. (Currently Amended) The method of claim 7, wherein ~~PuPyCpGPuPy~~ $\underline{Pu_1\ Py_2\ CpG\ Pu_3\ Py_4}$ comprises phosphodiester bases.

10. (Original) The method of claim 7, wherein $Pu_1Py_2CpGPu_3\ Py_4$ are phosphodiester bases.

11. (Original) The method of claim 7, wherein $X_1X_2X_3$ and $X_4X_5X_6(W)_M\ (G)_N$ comprise phosphodiester bases.

12. (Original) The method of claim 7, wherein $X_1X_2X_3$ comprises one or more phosphothioate bases.

13. (Original) The method of claim 7, wherein $X_4X_5X_6(W)_M\ (G)_N$ comprises one or more phosphothioate bases.

14. (Currently Amended) The method of claim 7, wherein $X_1X_2X_3$ ~~PuPy~~ $\underline{Pu_1Py_2}$ and $\underline{Pu_3\ Py_4}$ ~~PuPy~~$X_4X_5X_6$ are self complementary.

15. (Original) The method of claim 7, wherein the opportunistic infection is a bacterial infection, a fungal infection, a viral infection, a protozoan infection, a prion disease, or a neoplasm.

16. (Original) The method of claim 7, wherein the opportunistic infection is infection with *Leishmania*.

17. (Original) The method of claim 7, wherein the opportunistic infection is salmonellosis, syphilis, neurosyphilis, turberculosis, atypical mycobacterial infection, bacillary angiomatosis, aspergillosis, candidiasis, coccidioidomycosis, cryptococcal meningitis, hepatitis B, histoplasmosis, cryptosporidiosis, isosporiasis, microsporidiosis, *Pneumocystis Carinii* pneumonia, toxoplasmosis, *Cytomegalovirus*, hepatitis, herpes simplex, herpes zoster, human papiloma virus, *Molluscum Contagiosum*, oral hairy leukoplakia, progressive multifocal leukoencephalopathy, Kaposi's sarcoma, systemic non-Hodgkin's lymphoma, or primary CNS lymphoma.

18. (Original) The method of claim 2, further comprising administering to the subject a combination of drugs which comprises a highly active anti-retroviral therapy (HAART).

19. (Original) The method of claim 2, further comprising administering an anti-retroviral drug.

20. (Original) The method of claim 2, wherein the anti-retroviral retroviral drug comprises 3'-azido-3'dexoy-thymidine (AZT).

21. (Original) The method of claim 1, wherein the oligodeoxynucleotide comprises a sequence selected from the group consisting of SEQ ID NO: 1, SEQ ID NO: 2, SEQ ID NO: 3, SEQ ID NO: 4, SEQ ID NO: 5, SEQ ID NO: 6, SEQ ID NO: 7, SEQ ID NO: 8, SEQ ID NO: 9, SEQ ID NO: 10, SEQ ID NO: 11, SEQ ID NO: 12, SEQ ID NO: 13, SEQ ID NO: 14, SEQ ID NO: 15, and SEQ ID NO: 16.

22. (Original) The method of claim 1, wherein the oligodeoxynucleotide is a K oligonucleotide that comprises a sequence represented by the formula:

5'-$N_1N_2N_3$T-CpG-W$N_4N_5N_6$-3' (SEQ ID NO: 20)

wherein the central CpG motif is unmethylated, W is A or T, and N_1, N_2, N_3, N_4, N_5, and N_6 are any nucleotides.

23. (Currently Amended) ~~Use of an~~ A method for treating a subject infected with an immunodeficiency virus, comprising administering to the subject a therapeutically effective amount of an oligodeoxynucleotide of least ~~about~~ 16 nucleotides in length and comprises a sequence represented by the following formula:

5' $X_1X_2X_3$ Pu_1 Py_2 CpG Pu_3 Py_4 $X_4X_5X_6(W)_M$ $(G)_N$-3' (SEQ ID NOs: 22-98)

wherein the central CpG motif is unmethylated, Pu is a purine nucleotide, Py is a pyrimidine nucleotide, X and W are any nucleotide, M is any integer from 0 to 10, and N is any integer from 4 to 10, and an antigen of an immunodeficiency virus,
thereby treating the subject. ~~for the treatment of an immunodeficiency virus infection~~.

24. (Canceled)

25. (Original) A method of increasing an immune response to an opportunistic infection in an immunocompromised subject, comprising administering to the subject a therapeutically effective amount of an immunostimulatory D oligodeoxynucleotide or an immunostimulatory K oligodeoxynucleotide, wherein an antigenic epitope of a polypeptide is not administered to the subject, thereby increasing the response to the opportunistic infection.

26. (New) The method of claim 7, wherein the oligodeoxynucleotide has the nucleic acid sequence set forth as 5'XXTGCATCGATGCAGGGGGG 3' (SEQ ID NO: 1), wherein X is a G.

27. (New) The method of claim 23, wherein the oligodeoxynucleotide has the nucleic acid sequence set forth as SEQ ID NO: 177.